

REMARKS

I. Introduction

In the Office Action, the Examiner rejected claims 1,2, 5-8, 11, 12, 14-22, and 25-30 under 35 U.S.C. §102(e) as being anticipated by Asakawa (U.S. Patent No. 6,135,809); rejected claims 1,2, 5-8, 11, 12, 14-22, and 25-30 under 35 U.S.C. §102(e) as being anticipated by Hakoziaki (U.S. Patent No. 6,234,845); rejected claims 3, 4, 9, 10, 13, 23, and 24 under 35 U.S.C. §103(a) as being unpatentable over Asakawa in view of Horie (U.S. Patent No. 6,231,360); and rejected claims rejected claims 3, 4, 9, 10, 13, 23, and 24 under 35 U.S.C. §103(a) as being unpatentable over Hakoziaki in view of Horie.

The Office Action Summary suggests that the Examiner also rejected claims 31-33, but the Office Action does not state the basis for this rejection. The Examiner discussed claims 31-33 and the Hakoziaki reference on the bottom of page 6 of the Office Action, but did not set forth the grounds of his rejection. We will assume, for the purposes of this Office Action only, that the Examiner intended to reject these claims under 35 U.S.C. §102(e) as being anticipated by Asakawa and under 35 U.S.C. §102(e) as being anticipated by Hakoziaki.

Applicants respectfully traverse all rejections set forth in the Office Action. By this Amendment, Applicants have cancelled claims 1-33 and added new claims 34-63. Applicants submit that pending claims 34-63 are allowable over the applied references.

II. Information Disclosure Statement

The Office Action noted that the Examiner has not considered certain references submitted with the Information Disclosure Statement of February 21, 2006. These

references include Office Actions received in co-pending patent applications. As these Office Actions are not (i) U.S. patents or (ii) U.S. patent application publications, Applicants listed them as “non-patent literature documents” on the SB-08 form submitted on February 21, 2006. The Examiner also did not consider four Japanese patent documents listed on page 5 of the SB-08 form. Applicants respectfully request consideration of these references.

III. New Claims 34-43

By this amendment, Applicants have added new claims 34-63. Claims 34 and 54 are independent claims, while claims 35-53 and 55-63 depend from claims 34 and 54, respectively.

Claim 34 recites a “card connector for holding either of first and second cards, the first card having an upper body portion, a lower body portion, recessed portions on a bottom surface of the first card, and contact pads provided in the recessed portions” and “the second card having a card body portion having the substantially the same size as the upper body portion of the first card, and contact pads arranged on a bottom surface of the card body portion.” Support for these recitations may be found, for example, in claim 1 as originally filed and at page 15, line 11 to page 16, line 22 of the specification.

Claim 54 recites an “electronic device comprising a circuit board and a card connector mounted on the circuit board” the card connector being “operable to hold either of first and second cards, the first card having an upper body portion, a lower body portion, recessed portions on a bottom surface of the first card, and contact pads provided in the recessed positions” and “the second card having a card body portion having the substantially the same size as the upper body portion of the first card, and contact pads arranged on a bottom surface of the card body portion.” Support for these

recitations may be found, for example, in claim 1 as originally filed and in the specification at page 13, lines 1-3 and page 15, line 11 to page 16, line 22.

Claims 34 and 54 also requires “a connector housing having an upper wall and side leg portions adjacent to both ends of the upper wall.” Moreover, “each side leg portion includ[es] first and second side walls and a step-like lower wall formed between the first and second side walls.” The specification supports these recitations, for example, at page 14, lines 4 to 24. Figures 1 and 4 provide further exemplary support.

The card connectors recited in claims 34 and 54 further require “a base plate adjacent to the leg portion, the base plate being opposite the upper wall.” The specification provides support for the claimed base plates, for example, at page 15, lines 6-9. Figures 1 and 9 illustrate two embodiments of card connectors consistent with the invention, each of which contains an exemplary base plate 31.

According to claims 34 and 54, there are “contact terminals arranged on the base plate, to electrically couple with the contact pads arranged on the first and second cards.” The specification provides exemplary support for these recitations at page 13, line 14 to page 14, line 3.

Claims 34 and 54 also recite “a first space” and “a second space.” Claim 1, as originally filed, included first and second spaces. The first spaces in claims 34 and 54 are “defined by the upper wall, the first side walls, and the lower walls to hold side edge portions of the upper body portion of the first card and the body portion of the second card and to accommodate the upper body portion of the first card and the body portion of the second card.” The second spaces claimed in claims 34 and 54 are “defined by the second side walls, to accommodate the lower body portion of the first card, adjacent

to the first space.” Additional support for the claimed first and second spaces may be found, for example, in the specification at page 14, line 14 to page 16, line 14 and in Figures 1, 4, 5, and 6.

Finally, claims 34 and 54 require that “no portion of the base plate extends into the second space.” Figures 1 and 4 provide exemplary support for this recitation.

Claims 35-53 and 55-63 generally correspond to cancelled claims 2-20 and 22-30, respectively. To enhance readability in view of new claims 34 and 54, Applicants have made minor adjustments to the wording of these dependent claims. Moreover, new claim 44 depends from claim 34, but cancelled claim 11 was an independent claim.

IV. Claims 34-63 are not Anticipated by Asakawa

New claims 34-63 are allowable over Asakawa. Asakawa fails to disclose a “second space defined by the second side walls,” wherein “no portion of the base plate extends into the second space,” as recited in independent claims 34 and 54.

The Office Action contends that Asakawa teaches a “space to accommodate a lower portion of a card (defined between the side walls by both spaces)” and a “space ... defined by both spaces as shown in the earlier presented figure.” (Office Action at 3-4.) Independent claims 34 and 54, however, each recite “a second space defined by the second side walls” where “no portion of the base plate extends into the second space.” Asakawa fails to disclose these claim elements.

According to the Office Action, “an indefinite article ‘a’ or ‘an’ in patent parlance carries the meaning of ‘one or more’ in open-ended claims.” (Office Action at 8.) While this may be true, Asakawa fails to teach any space “defined by” the second side walls where no portion of the base plate extends into the space. Instead, as illustrated in

Figure 2 of Asakawa, a partition 28 sits between the side walls. This partition extends into any space “defined by” the second side walls.

The Office Action attempts to cobble together two spaces, each defined by a single side wall and a side of partition 28, to arrive at the claimed second space. The proposed combination of these two areas does not amount to a space “defined by the second side walls,” wherein “no portion of the base plate extends into the second space,” as claims 34 and 54 require. Both of the second side walls wall must define any space meeting these claim limitations. The Examiner has not pointed to any such space in Asakawa.

Thus, Asakawa does not disclose the claimed second space, and independent claims 34 and 54 are allowable over Asakawa for at least this reason. Moreover, Claims 35-53 are allowable at least due to their dependence from claim 34 and claims 54-63 are allowable at least due to their dependence from claim 54.

V. Claims 34-63 are not Anticipated by Hokozaiki

Hokozaiki also fails to disclose a “second space defined by the second side walls,” wherein “no portion of the base plate extends into the second space.”

As seen, for example, in Figure 2 of Hokozaiki, a portion of the alleged base plate (seen at the top of the figure) extends downward between the alleged second sidewalls. This portion of the alleged base plate, which holds contact pin array 37, rests directly between the alleged sidewalls. Accordingly, in Hokozaiki, a portion of the base plate extends into any space “defined by the second side walls.”

For at least these reasons, Hakozaiki fails to disclose all elements of the card connector recited in independent claims 34 and 54. Accordingly, Hakozaiki does not anticipate claims 34 or 54, and the claims are allowable over this reference. Claims 35-

53 and 55-63 are allowable at least due to their respective dependence from claims 34 and 54.

VI. Horie Does Not Cure the Deficiencies of Asakawa or Hakozaiki

Neither Asakawa, Hakozaiki, Horie, nor the alleged combination of these references teaches or suggests each and every element of claims 34 and 54. In particular, Horie does not teach or suggest the claimed second space and base plate, and the Examiner does not rely on Horie for such teachings. Horie, consequently, fails to overcome the above-noted deficiencies of Asakawa and Hakozaiki. The pending claims are allowable over the applied references, whether taken alone or in combination.

VII. Patentability over Copending Applications and Patents Issued Therefrom

For the Office's convenience, the Applicants identify in Table 1 below certain copending applications, including filing date, assignment, and inventor information. Applicant provides herewith Exhibit 1, which contains the currently pending claims of the listed applications. Applicant submits these claims for the Office's convenience in evaluating any potential issues regarding statutory or obviousness-type double patenting.

Attorney Docket No.	U.S. Patent Application No.	U.S. Filing Date/ 371 (c) Date	First Named Inventor	Title	Assignment Recorded (Reel, Frame, Date)	Publication Date
04208.0208-00000	10/972,653	October 26, 2004	Minoru IGARASHI	IP CARD-CONNECTING ADAPTER	Reel: 015939, Frame: 0245, on October 26, 2004	U.S. Published Application No. US 2005-0088829 A1 Dated: March 28, 2005

Attorney Docket No.	U.S. Patent Application No.	U.S. Filing Date/ 371 (c) Date	First Named Inventor	Title	Assignment Recorded (Reel, Frame, Date)	Publication, Date
04208. 0212- 0000	11/038,274	January 21, 2005	Osamu SHIMIZU	CARD CONNECTOR FOR AN ELECTRONIC DEVICE AND A CONTACT USED THEREIN	Reel: 016197, Frame: 0534, on January 21, 2005	U.S. Published Application No. US 2005- 0164559 A1 Dated: July 28, 2005

VIII. Conclusion

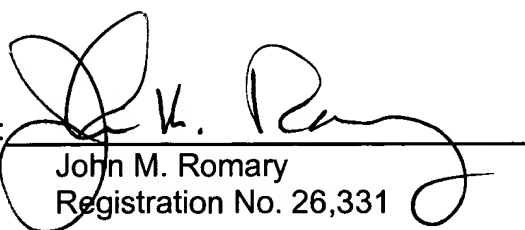
In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Dated: September 12, 2006

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1106767_2

PENDING CLAIMS
Application No. 10/972,653
Attorney Docket No. 04208.0208-00000
Filed October 26, 2004

1. An IC card-connecting adapter for allowing an electronic apparatus having a card connector sized to accept a first IC card to accept a second, dimensionally different IC card, comprising:

a housing member configured to detachably accommodate said second IC card, and

a connecting section provided at one end of said housing member,
wherein

said connecting section includes at least one contact terminal having a pad portion at one end thereof and a contact portion formed as one piece with said pad portion at the other end thereof;

said pad portion is formed and positioned in said connecting section to be physically and electrically connected to said card connector of said electronic apparatus when said adapter is inserted into said electronic apparatus; and

said contact portion is formed to physically and electrically accept said second IC card.

2. An IC card-connecting adapter as claimed in claim 1, wherein said contact terminal is one of a plurality of contact terminals provided in correspondence to the respective electrodes of said second IC card, and at least one of said contact terminals is provided with a ground contact portion to be electrically connected to said housing member in an intermediate area between said contact portion and said pad portion.

3. An IC card-connecting adapter as claimed in claim 1, wherein said connecting section has a support section for supporting said contact terminal and a groove into which said pad section of said contact terminal is inserted.

4. An IC card-connecting adapter as claimed in claim 2, wherein said ground contact portion is brought into contact with a ground piece provided integral with an end of said housing member.

5. An IC card-connecting adapter as claimed in claim 1, wherein said housing member has a resiliently deformable contact piece brought into contact with a portion of said contact terminal between said contact portion and said pad portion.

6. An IC card-connecting adapter as claimed in claim 2, wherein said contact terminal having said ground contact portion is arranged at an end of the arrangement of said contact terminals.

7. (Cancelled)

8. An IC card-connecting adapter as claimed in claim 1, wherein said pad portion comprises thin metallic sheet material.

9. An IC card-connecting adapter as claimed in claim 8, wherein said pad portion lies exposed in a slit formed in said housing member.

10. An IC card-connecting adapter as claimed in claim 1, wherein said contact portion is a resilient contact portion.

11. An IC card-connecting adapter for allowing an electronic apparatus having a card connector sized to accept a first IC card to accept a second, dimensionally different IC card, comprising:

a housing member configured to detachably accommodate said second IC card, and

a connecting section provided at one end of said housing member, wherein

said connecting section includes at least one contact terminal having a pad portion at one end thereof and a resilient contact portion formed as one piece with said pad portion at the other end thereof;

said pad portion is formed by a thin metallic sheet material to be exposed via a slit of said housing member and positioned in said connecting section to be physically and electrically connected to said card connector of said electronic apparatus when said adapter is inserted into said electronic apparatus; and

said contact portion is formed to physically and electrically accept said second IC card.

PENDING CLAIMS
Application No. 11/038,274
Attorney Docket No. 04208.0212-00000
Filed January 21, 2005

1. A card connector for an electronic device to which one of a plurality of IC cards having the same pad pitch but different card external dimensions can be selectively attached, comprising:

a connector body having a space configured to receive either of two inserted IC cards having different dimensions and

a plurality of contacts provided in the space, said contacts being substantially parallel to the direction along which either IC card is inserted,

wherein each of the contacts provided in the space has a first contact point disposed on a first elastic portion, a second contact point disposed on a second elastic portion, a plate-like fixing portion, and a terminal portion,

the first elastic portion is positioned in a cantilever-like manner at a front side of the plate-like fixing portion, and the second elastic portion is positioned in a cantilever-like manner at a rear side of the plate-like fixing portion,

the first and second contact points are positioned in a front-and-rear relationship along the direction along which either IC card is inserted,

the first contact point is located to make electrical contact with a first IC card when the first IC card is inserted in the card connector and said second contact point is located to make electrical contact with a second, dimensionally different, IC card when the second IC card is inserted into the card connector.

2. A card connector for an electronic device to which one of a plurality of IC cards having the same pad pitch can be selectively attached, comprising:

a space configured to receive one of a first IC card and a second different dimensional IC card;

a plurality of contacts provided in the space, said contacts being substantially parallel to the direction along which the first and second IC cards are inserted;

a guide mechanism for identifying which of said first and second IC cards is being inserted; and

an actuator for guiding inserted IC cards based on the result of the identification by the guide mechanism, wherein

at least one of the contacts provided in the space has first and second contact points in a front-and-rear relationship along the direction in which the IC card is inserted, the first contact point contacts a first pad on the first IC card when the first IC card is inserted, the second contact point contacts a second pad on the second IC card when the second IC card is inserted, when the first IC card is inserted, the actuator guides the first IC card to a position where the first contact point contacts the first pad and, when the second IC card is inserted, the actuator guides the second IC card to a position where the second contact point contacts the second pad.

3. The card connector for the electronic device as claimed in claim 1, wherein:

said first elastic portion is formed by partially cutting and elevating a portion of said fixing portion.

4. (Currently Amended) The card connector for the electronic device as claimed in claim 3, wherein

said fixing portion is further provided with holes between said first and second elastic portions.

5. (Currently Amended) The card connector for the electronic device as claimed in claim 3, wherein

said first and second elastic portions extend in different directions along said contact.

6. (Currently Amended) The card connector for the electronic device as claimed in claim 3, wherein

said first and second elastic portions extend in the same direction along said contact.

7. (Currently Amended) The card connector for the electronic device as claimed in claim 3, wherein

at least one of said first and second elastic portions is partially cut and elevated to extend in the direction along which the first and second IC cards are inserted.

8. (Previously Presented) The card connector for the electronic device as claimed in claim 3, wherein

said first and second contact points have different heights.

9. (Currently Amended) A contact for attachment to a card connector for an electronic device to which one of a plurality of IC cards having the same pad pitch can be selectively attached, comprising:

a first contact point disposed on a first elastic portion, a second contact point disposed on a second elastic portion, a plate-like fixing portion, and a terminal portion, wherein

the first elastic portion is positioned in a cantilever-like manner at a front side of the plate-like fixing portion, the second elastic portion is positioned in a cantilever-like manner at a rear side of the plate-like fixing portion, and the first and second contact points are positioned

along said contact in a front-and-rear relationship along the direction along which the card is inserted.

10. (Currently Amended) A card connector for an electronic device to which one of a plurality of IC cards having the same pad pitch can be selectively attached, comprising:

a space configured to receive one of a first IC card and a second different dimensional IC card;

a plurality of contacts provided in the space, said contacts being substantially parallel to the direction along which the first and second IC cards are inserted;

a spring-loaded gate dimensioned to permit passage of said first IC card and prevent passage of said second IC card; and

a guide mechanism dimensioned to detect insertion of said second IC card and coupled to permit pivoting of said gate upon detection of said second IC card to permit passage of said second IC card into said space, wherein

at least one of the contacts provided in the space has first and second contact points in a front-and-rear relationship along the direction in which the IC card is inserted, the first contact point contacts a first pad on the first IC card when the first IC card is inserted, and the second contact point contacts a second pad on the second IC card when the second IC card is inserted.

11. (Currently Amended) The card connector for an electronic device as claimed in claim 1, wherein the first contact point does not contact the second IC card when the second IC card is inserted and the second contact point does not contact the first IC card when the first IC card is inserted.

12. (New) A card connector for an electronic device to which one of a plurality of IC cards having the same pad pitch but different card external dimensions can be selectively attached, comprising:

a connector body having a space configured to receive either of two inserted IC cards having different dimensions; and

a plurality of contacts provided in the space, said contacts being substantially parallel to the direction along which either IC card is inserted,

wherein at least one of the contacts provided in the space has a first contact point disposed on a first elastic portion, a second contact point disposed on a second elastic portion, a plate-like fixing portion, and a terminal portion,

the fixing portion comprises first and second plate-like sections, the first plate-like section extends from the first elastic portion to the second elastic portion, the second plate-like section is disposed between the second elastic portion and the terminal portion, and the first and second plate-like sections lie in a plane substantially perpendicular to a direction in which the first and second contact points deflect,

the first and second contact points are positioned in a front-and-rear relationship along the direction along which either IC card is inserted,

the first contact point is located to make electrical contact with a first IC card when the first IC card is inserted in the card connector and said second contact point is located to make electrical contact with a second, dimensionally different, IC card when the second IC card is inserted into the card connector.

13. (New) A contact for attachment to a card connector for an electronic device to which one of a plurality of IC cards having the same pad pitch can be selectively attached, comprising:

a first contact point disposed on a first elastic portion, a second contact point disposed on a second elastic portion, a plate-like fixing portion, and a terminal portion, wherein

the fixing portion comprises first and second sections, the first section extends from the first elastic portion to the second elastic portion, the second section is disposed between the second elastic portion and the terminal portion, and the first and second sections lie in a plane substantially perpendicular to a direction in which the first and second contact points deflect, and the first and second contact points are positioned along said contact in a front-and-rear relationship along the direction along which the card is inserted.